economics

The Nature of Effective Forecasts

flashcard concepts

- Forecasters fail due to three human Weaknesses
  - Linear Perception
  - Group Think
  - Messenger Syndrome
- A *Consensus* forecast is a view into the 'mind of the market' or a the average forecast
  - *Weakness* - tends to miss important economic turning points such as a recession
  - *Use* - can ask yourself if the consensus makes sense. If not, be a contrarian
- A *Scenario* forecast allows user to assign probabilities to several potential economic outcomes or 'states of nature.' A forecast of several economic variables underlies the forecast for each state
  - *Weakness* - too many potential events or states may occur. How to assign probabilities
  - *Use* - can evaluate the effects of low probability events
- *Rate of Change Data* should be used in lieu of the absolute levels of economic activity. Moving averages are an effective method to employ rate of change data

Problem Set: Nature of Effective Forecasts by Bostian

1. DESCRIBE why judgment is needed in spite of the existence of econometric models for forecasting
   - The human element in economic decision making may lead to break down of any models based on historical data. Unexpected events and policy changes also need to be accounted for in any forecasting method
2. EXPLAIN the use of evaluating past forecasts.
   - A feedback control system is required to analyze what changes are needed in the forecasting variables to increase their accuracy and fine-tune them
3. STATE how macroeconomic forecasts help in security analysis.
   - The environment in which a corporation operates affects its profitability. Thus accurate forecasts could help in better determining the company's revnues/sales and costs and hence, its stock price.

Developing a Recommendation for a Global Portfolio

Flashcard concepts

- Labor costs have been becoming more expensive so the trend is to substitute capital for labor.
- The major demographic trend over the next 20 years will be the aging of the population. This will have an effect on:
  - The growth in the labor force should be declining. Hence, to maintain economic growth, we will need to see increases in productive efficiency
  - An increase in the savings rate. More savors will be forced to invest in equities as the yield on fixed-income investment falls.
  - Potentially lower rates of borrowing will translate into lower interest rates
- The author (Clough) believes that equity markets fact 3 Risks:
  - Tight Monetary Policies
  - Trade Wars
  - Poor Government Fiscal Policies

problem Set: developing a recommendation for a global portfolio by Clough

1. DESCRIBE how the aging population over the next 20 years in the US will impact the following:

i. Productivity - The growth in the labor force should be declining. Hence, to maintain economic growth, we will need to see increases in productive efficiency

ii. Savings Rates - An increase in the savings rate should occur as more baby boomers move to their prime savings years. Clough believes that low yields on CDs and other money market instruments will force savers into the equity markets and onto the long end of the yield curve. This behavior may affect the valuation of world equity markets

iii. Borrowing Rates - Borrowing rates should decrease because of the lower need for borrowed funds. Potentially lower rates of borrowing will translate into lower interest rates.

2. DISCUSS the impact that a reduction of bank lending can have on the economy.

Bank tightening can lead to recession. Why? Because if banks are unwilling to lend, then potential borrowers are turned away and potentially profitable projects are not financed. Unemployment rises, production falls and the country falls into recession. As the country falls into recession, the central bank tries to loosen monetary policy by lowering interest rates and making more funds available to banks. Lending increases, employment rises, production increases, and interest rates rise again as the demand for funds exceeds the supply and the cycle repeats.

Using Economic Models

flashcard concepts

- Econometric models are the most formal of the approaches to economic forecasting, relying on a large number of equations and variables to project other variables. These models are expensive and difficult to duplicate.
- The leading-indicators approaches attempt to select variables that are believed to be the best predictors of future economic movements
- Technical analysts believe that movements in economic variables can be predicted based on both rational and irrational factors
- Judgmental techniques rely on a much less formal process where an investment professional selects a variety of indicators that he believes, based on his experiences, can be used to forecast the future
- Models are useful in the following ways; they -
  - allow for the more formal testing of hypotheses and ideas
  - assist in determining the sensitivities of different variables
  - promote internally consistent forecasts (they can serve to verify intuitive hunches)
  - identify underlying statistical properties, which may assist in future forecasting endeavors
- Many problems exist with the use of economic models, including:
  - *Implausible Results*- drawing conclusions using a small number of variables from a much larger variable universe exposes the researcher to charges of inaccuracy
  - *Statistical v. Real World Significance* - Models are only valuable if they contribute real world applications that previously did not exist

  - *Errors in Underlying Data* - Variables used for economic forecasting which are subject to periodic revisions (i.e., savings rates) are not always suitable for analysis unless the models exhibit predictability when using both raw and adjusted data
  - *Assumptions* - Although models must start from some basic assumptions, forecasting methods are often viewed unfavorably when the assumptions themselves are subject to additional assumptions
  - *Structural Changes* - If structural changes occur in the economy, then historic relationships may no longer be useful in attempting to predict the future
  - *Simultaneity* - occurs whenever there is not a one-way (causal) relationship between two variables
  - *Robustness* - occurs whenever statistically significant relationships discovered in the modeling process are not dependent on a specific time period or the further manipulation of a particular variable
  - *Data Mining* - occurs whenever a researcher does not start out with a test hypothesis and keeps trying different combinations of variables in order to produce statistically significant relationships
  - *Time-series data* - problems can result if the variables that are being used to detect trends may themselves have trends embedded in them
  - *Vector Autoregressive Equations* - do not impose much structure on the variables selected for your model, thus “statistical work without theory.”
- Economic economic models:
  - tend to do better at looking backward rather than at looking forward
  - exhibit effectiveness in simulating complex issues
  - assist in testing intuitive hunches
  - do not capture assumptions that the market may have made which conflict with historical trends
  - tend to be difficult to apply to establish good investment strategies

Problem Set: using economic models by shenfeld

1. DISCUSS the following approaches to economic forecasting

i. Econometric Models - Econometric models are the most formal of the approaches to economic forecasting. These models rely on a large number of equations and variables, which are used to project other variables related to GNP, consumer spending, etc. Because of the expense and extensiveness of the data, duplicating forecasts based on econometric models is quite different. However, econometric models can be less complicated (i.e., linear regression)

ii. Leading-indicator Approaches - In these approaches, forecasters attempt to select variables that they believe will best predict future economic movements. While statistical analysis can be applied to these models, most practitioners look for trends or absolute movements in these variables, either in isolation or in the aggregate.

iii. Technical Analysis - Technical analysts believe that movements in economic variables can be predicted based on both rational and irrational factors. Rational factors include underlying economic fundamental variables. Irrational factors include public perception and attitude. Technical analysts may employ some graphic or visual representation of data in order to draw conclusions about future trends.

2. DISCUSS the following problems in the use of economic models

i. Structural Changes - Most statistical models depend on the continuation of historical relationships in order to sustain their predictive power. If structural changes occur in the economy, then historic relationships may no longer be useful in predicting the future. Structural changes in the international economy have permitted lower levels of unemployment to occur without inflation becoming a problem

ii. Simultaneity - Simultaneity occurs whenever there is not a one-way relationship existing between two variables. If two variables are influencing each other, lack of causality renders these models largely ineffective.

iii. Robustness - Robustness occurs whenever statistically significant relationships discovered in the modeling process are not dependent on a specific time period or the further manipulation of a particular variable. Robustness is extremely difficult to determine because most researchers are not going to discuss what didn't work in their modeling process. If you suspect that a model is not robust, then you should be very suspicions of any conclusions drawn therefrom.

iv. Data Mining - Data mining occurs whenever a researcher does not start out with a test hypothesis and keeps trying different combinations of variables in order to produce statistically significant relationships. Results from these studies are suspect as the statistical relationships claimed might be the result of mere chance. If you manipulate your data set enough, you are likely to find some sort of relationship between some model variables over a given time period. Such 'mined' results may lack validity

3. JUDGE the usefulness of economic models

- tend to do better looking backward than at looking forward
- exhibit effectiveness in simulating complex issues
- assist in testing intuitive hunches
- do not capture assumptions that the market may have made which conflict with historical trends
- tend to be difficult to apply to establish good investment strategies

Economic Forecasts and the Asset Allocation Decision

flashcard concepts

- Shifts in demographics, changes in corporate compensation, lower inflation, reduction in the federal deficit are all key structural changes in the US economy that have promoted healthy capital market performance during the 90s
- Lowering inflationary expectations have shifted consumer and business spending behavior from a "storing up" mentality (fear of rising prices) to one of confident of relative price inflexibility
- Goldman Sachs refers to the current environment of lower economic and consumption growth as the "Silly Putty" economic cycle, which represents the "stretching out" of the traditional upside down "V," which results in lower economic peaks and valleys
- Current profit patterns for corporations have deviated from traditional patterns because the current business cycle has "stretched out" over a longer time period and has lasted longer than any other in US history. As a result, profit growth has set record levels
- Productivity gains have kept pace with wage increases resulting in controlled inflation and increased corporate profit margins

- An inverse relationship exists between equity P/E multiples and inflation. Investors are willing to pay a greater premium for earnings when they perceive that they are not influenced by inflation and are sustainable
- A direct relationship exists between inflation and dividend yields. An inverse relationship exists between equity P/E multiples and dividend yield
- Technology companies have outpaced the economy as a whole and their sector performance has shown equally dramatic outperformance of the market
- The financial services sector has become increasingly more attractive this decade because of the healthy bond market, relatively low bank stock prices, the consolidation of the financial services industry, and higher demand for financial services based on demographic shifts caused by aging baby boomers
- US investors are increasingly drawn to selected international markets because of diversification, expectations of higher returns, and currency exposure
- Stock market performance in specific markets can be heavily influenced by the relative presence of US investors

Problem set: Economic Forecasts and the asset allocation decision by cohen

1. DISCUSS how each of the following structural changes in the US economy may have influenced the performance of the US capital markets in the 90s

i. Demographic Changes - Baby boomers have started moving into the prime savings period of their lives. As a result of higher savings and lower consumption rates, stock market activity has increased

ii. Corporation Management - Corporate management has changed in 2 basic ways. First, there has been a shift in the way managers are COMPENSATED. The previous several decades had witnessed corporate compensation tied to the size of the company. More recently, compensation has been tied more to bottom-line growth. This shift is more in line with shareholder wealth maximization goals. IN addition, lower inflation has caused a shift in corporate efficiency. In a high inflationary environment, it was easy to pas on costs caused by poor decision-making to the consumers in the name of inflation. In a LOW INFLATIONARY environment, this is a much less effective strategy

iii. Fiscal Policy - Led by Citizen desires, the Clinton administration has facilitated a reduction (and elimination since the article was written) of the US budget deficit. This has led to a more productive economy

iv. Inflation - Lower inflationary expectations have had pronounced effect on the behavior of Consumers and Business. CONSUMERS - their attitude has shifted from an “anticipation of future need and future income” to one that makes purchases based on relative price inflexibility. Previously, consumers would “store up” on goods in anticipation of price hikes. In addition, most individuals borrowing money believed that they would be better off in the future paying back “cheaper” dollars. BUSINESS - echoed consumer behavior in terms of spending. Businesses would store up inventory in anticipation of cost increases. With low inflationary expectations, business are more likely to keep inventory lean because relative price stability does not justify the cost of carrying additional inventory

2. DESCRIBE how the “Silly Putty” economy of the 90s has affected each of the following:

i. Profits - Profits have followed the “Silly Putty” expansion since 1986. These patters differ from historical relationships in 3 Ways

a.) The cycle has stretched out over a longer time period
b.) The cycle has lasted longer than any other in U.S. history
c.) Profit growth has set record levels

ii. Labor Costs - Labor costs have followed ‘stretched out’ cost patterns. Historically, economic growth has been associated with rising wage inflation caused by tighter labor markets. Productivity gains have kept pace with wage increases resulting in controlled inflation and increased corporate profit margins

iii. Dividend Yields - A direct relationship exists between inflation and dividend yields which also implies an inverse relationship between equity P/E multiples and dividend yield. Dividend yields are at their lowest levels in years, while ROE is at its highest level. A natural explanation for low dividend yields is that companies are well managed and reinvesting profits back into the firm generating superior return on assets and equity.

3. DISCUSS how structural changes in the economy have negatively affected overall opportunities in the following sectors:

i. Retail Stores - Overall opportunities in retail stores have declined along with consumption growth during this past decade. However, some opportunities still exist due to consolidation, niche markets, and strong management

ii. Commodities - Traditionally, commodities have served as a place of refuge in anticipation of economic peaks. However, the “Silly Putty” economy has made it difficult to determine when these peaks will occur. This has resulted in overall lackluster performance in this sector.

iii. Small Cap Stocks - Small-cap stocks have been overshadowed by the performance of large-cap stocks. This phenomenon has occurred as a result of consistent and healthy growth of earnings in large-cap companies. Investors haven’t felt a need to flee to small-cap stocks because of the returns generated by their large-cap counterparts.

4. DESCRIBE how increased international investing by US investors has influenced capital market performance

International investing by US investors has increased dramatically. As a result, correlations between global markets have also increase, as these markets are heavily influenced by US investor participation. US investors are increasingly drawn to selected international markets because of diversification, expectations of higher returns, and currency exposure. As a result, stock market performance in specific markets can be heavily influenced by the relative presence of US investors. Increased investment leads to greater economic activity and enhanced capital market returns.